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ABSTRACT

Describes and illustrates some innovative programs and facilities that interrelate school design with the larger concerns of the community. (MLF)

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NEW DIRECTIONS FOR SCHOOL DESIGN

BY CHARLES WILLIAM BRUBAKER, PERKINS & WILL

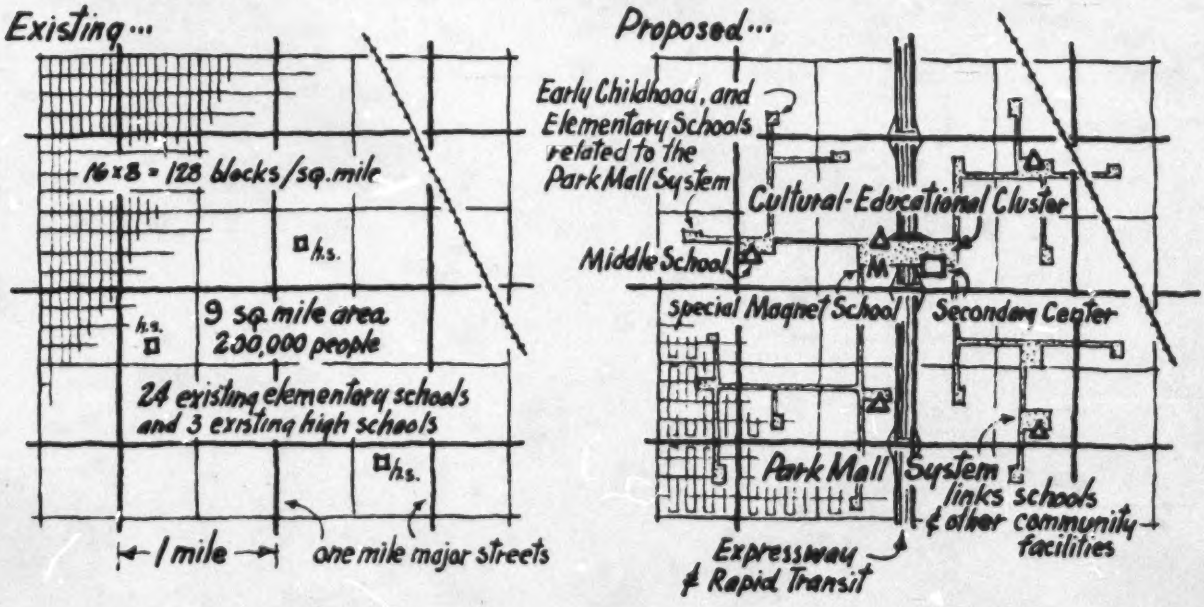
Recognition of the interrelatedness of all things characterizes our age.

SCHOOL DESIGN IS NO LONGER ISOLATED

IT IS INTERRELATED WITH THE LARGER CONCERNS OF THE COMMUNITY
AND SHOULD BE CONSIDERED IN CONCERT WITH THOSE CONCERNS
TO ACHIEVE NOT ONLY GOOD SCHOOLS
BUT ALSO GOOD COMMUNITY DESIGN

THE SCHOOL SYSTEM IS A SUB-SYSTEM OF THE SOCIAL SYSTEM
AND SCHOOL DESIGN IS A COMPONENT OF COMMUNITY DESIGN.
SCHOOL CONCERNS HAVE EXPANDED TO INCLUDE BROADER COMMUNITY CONCERNS
AND PLANNING CONCURRENTLY GIVES NEW IMPORTANCE TO SCHOOLS ....
... TO THEIR LOCATIONS, FORMS, AND RELATIONSHIPS TO THE COMMUNITY.

Example - Long Range Plan for Chicago Schools —
... a study by educational consultants Donald J. Leu and I. Carl Candoli



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SCHOOLS REACH OUT INTO THE COMMUNITY

UTILIZING EXISTING SERVICES, RESOURCES AND FACILITIES
AND INFLUENCE THE MECHANISMS (LAWS, TAXES, AGENCIES, ORGANIZATIONS, ETC.)
WHICH DELIVER SERVICES, CONTROL RESOURCES AND PROVIDE FACILITIES.

The new school facility is the city.

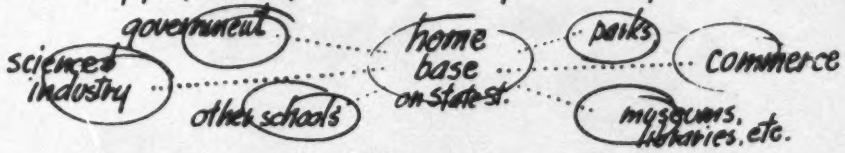
THE COMMUNITY EXTENDS INTO THE SCHOOLS

UTILIZING THEIR SERVICES, RESOURCES AND FACILITIES
AND WILL MORE DIRECTLY INFLUENCE THE SCHOOLS' DECISION-MAKING PROCESSES.

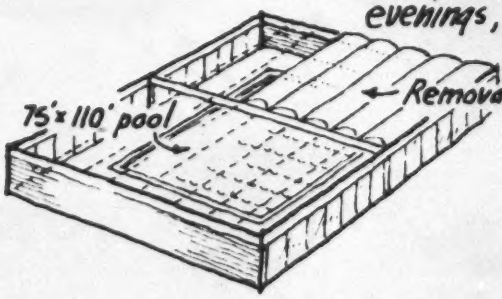
Note recent interest in local control and in neighborhood government.

The design response =
.... school concepts that are closely related to total community.

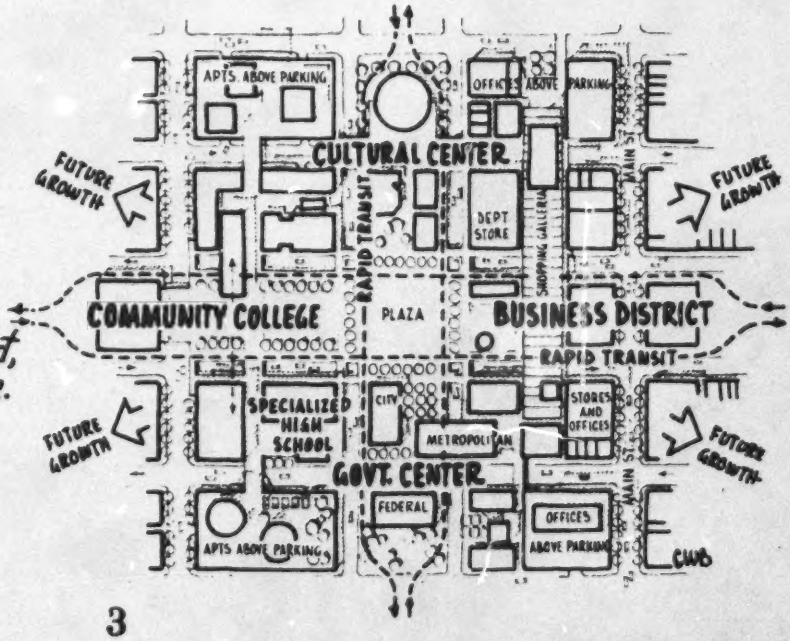
Example = Chicago's Metro High School (similar to Philadelphia's Parkway School)
with home base in a commercial office building on State Street,
utilizes many people and places in the city for its program.



Example = The physical education facilities, especially the indoor-outdoor swimming pool,
at the new middle school in Mamaroneck (Westchester County, N.Y.)
are used as a community recreation center
evenings, weekends, and all summer.



Example =
Part of the educational program can happen at the community center ....
... utilizing the cultural and government buildings, parts of the business district, and the community college.

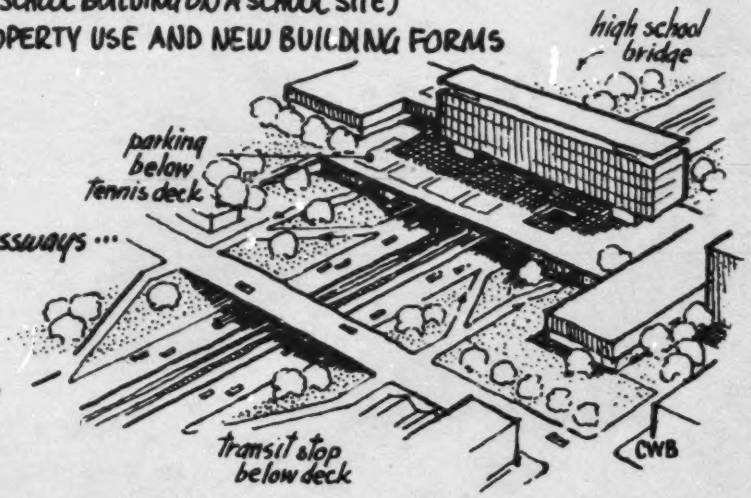


SCHOOLS FIND NEW KINDS OF SITES AND ADOPT NEW BUILDING FORMS

IN METROPOLITAN AREAS, WITH LAND INCREASINGLY SCARCE AND COSTLY,
THE OLD HABITS OF THE PAST (SCHOOL BUILDING ON A SCHOOL SITE)
YIELD TO NEW CONCEPTS OF PROPERTY USE AND NEW BUILDING FORMS

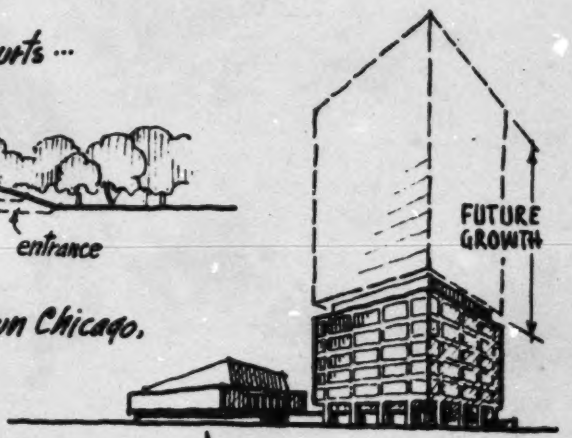
Utilizing air rights ...
... bridge decks (= new school sites) can tie back together neighborhoods cut apart by expressways ...

... and apartments can utilize air rights above schools



Schools in parks?
... using cut & fill ... creating berms & lower-level courts ...
... schools and parks are good neighbors ...

Jones Commercial High School, on State Street, downtown Chicago, includes a 6 floor office-building-like structure which will grow vertically.

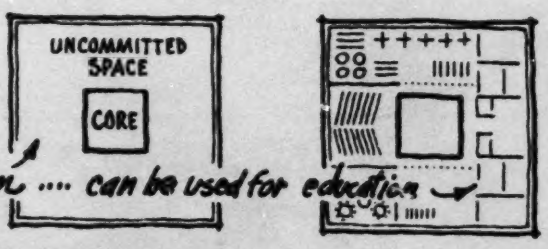


Jones has a work-study program with students gaining experience in Loop offices. Many community meetings are held in the auditorium.

LEASED SPACE CAN SERVE WELL SOMETIMES

NOTE THAT PRIVATE ENTERPRISE NATURALLY OPERATES EFFICIENTLY IN LEASED SPACE,
SHARING LAND AND STRUCTURE WITH OTHER USERS,
GAINING FLEXIBILITY AND
OPPORTUNITY TO EXPAND

The typical office building form ....
.... a highly developed flexible system .... can be used for education



The educational program is the tenant. As program changes, space changes.

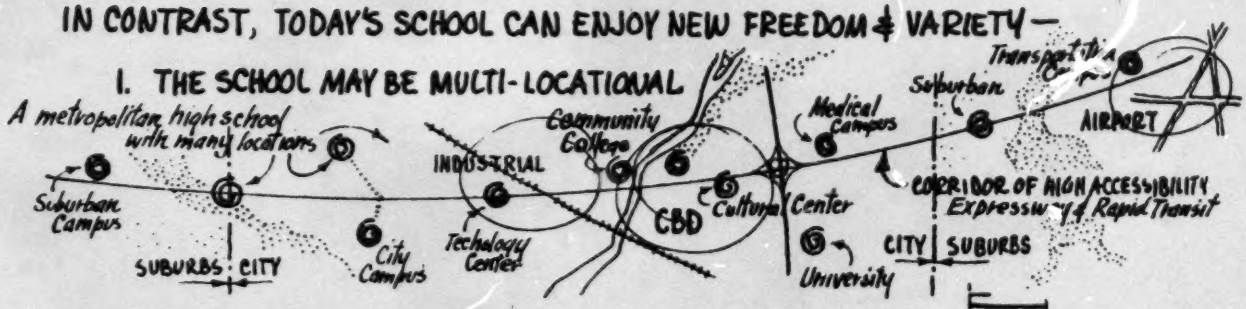
SCHOOLS ARE NO LONGER LIMITED TO THE RIGID FORMAT OF THE PAST

IN THE PAST, SCHOOL DESIGN WAS LIMITED BY TWELVE UNWRITTEN LAWS:

1 A SINGLE LOCATION .... *mobility ignored*
2 ISOLATED PROPERTY .... *with a fence around it*
3 INSTITUTIONAL CHARACTER .... *boxes of space + corridors = schoolhouse*
4 STANDARDIZED PROGRAMS .... *for classes, not individuals*
5 LEARNING PROGRAMS BASED ON LECTURES & BOOKS .... *then came TV*
6 RIGID GRADE SYSTEM .... *30 students for 12 years = the system*
7 STANDARD SCHEDULE .... *1 hour periods, 7 hour day, 5 day week, 9 month year*
8 DESIRE FOR UNCHANGING SPACE .... *for an unchanging world*
9 DESIRE FOR FINISHED SPACE .... *teacher knows best*
10 STANDARD STAFF .... *principal & teachers*
11 SERVING A SPECIFIC LIMITED TERRITORY .... *the neighborhood school*
12 NO COMPETITION .... *a single answer*

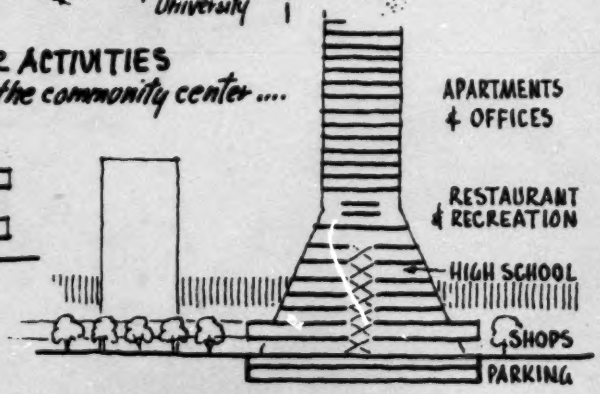
IN CONTRAST, TODAY'S SCHOOL CAN ENJOY NEW FREEDOM & VARIETY—

1. THE SCHOOL MAY BE MULTI-LOCATIONAL

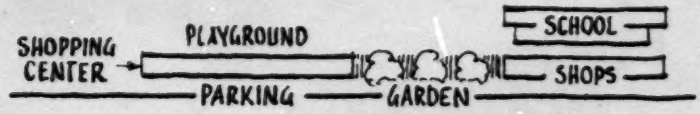


2. IT MAY SHARE PROPERTY WITH OTHER ACTIVITIES

A high school at the community center ....



An elementary school above a shopping center ...



= utilizing the wasted roofs of the shopping center

3. IT MAY BE NON-INSTITUTIONAL IN CHARACTER.

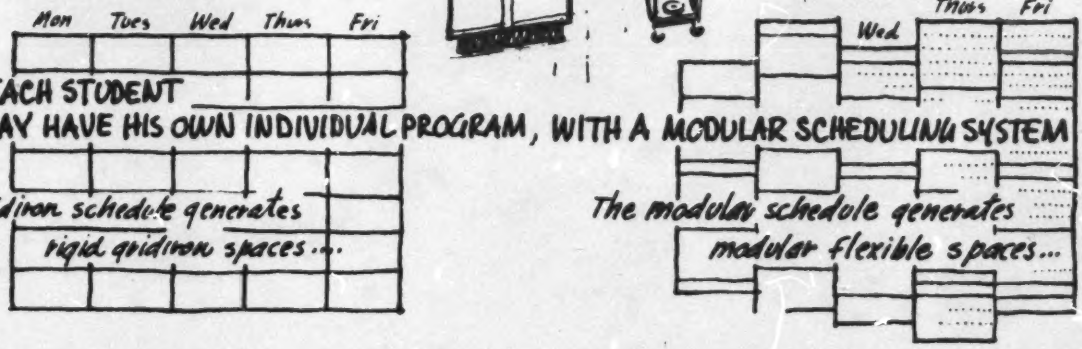
A new kind of education home base ....

4. THE SCHOOL MAY OFFER HIGHLY INDIVIDUALIZED PROGRAMS

Independent study and individualized programs with each student progressing at his own pace ....

5. THE SCHOOL MAY INCORPORATE LEARNING PROGRAMS BASED ON A WIDE VARIETY OF NEW MEDIA—

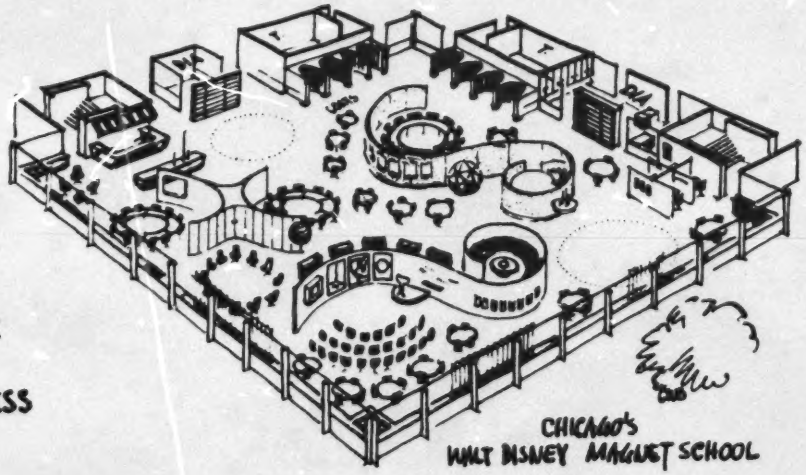
6. IT MAY BE NON-GRADED WITH EACH STUDENT PROGRESSING AT HIS OWN RATE



7. EACH STUDENT MAY HAVE HIS OWN INDIVIDUAL PROGRAM, WITH A MODULAR SCHEDULING SYSTEM

8. THE SCHOOL MAY USE FLEXIBLE ADAPTABLE SPACE ...

9. IT MAY USE UNFINISHED SPACE PERMITTING GROWTH AND CHANGE ...

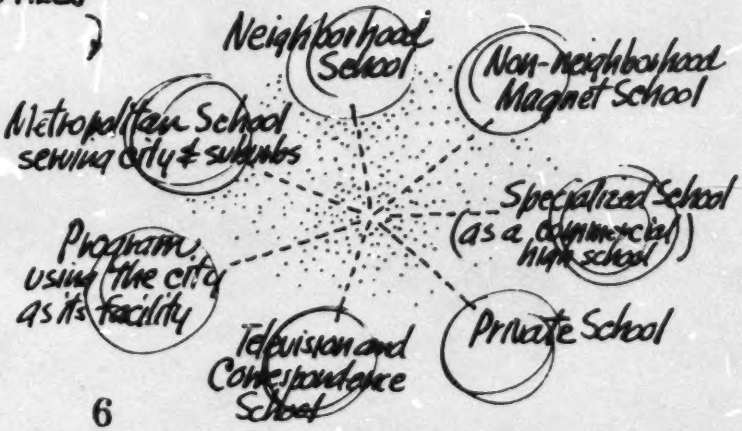


CHICAGO'S WALT DISNEY MAGNET SCHOOL

10. MANY KINDS OF PEOPLE MAY BE INVOLVED IN THE LEARNING PROCESS

11. THE SCHOOL MAY SERVE STUDENTS FROM ALL PARTS OF THE METRO AREA—

12. THE SCHOOL MAY HAVE TO FACE COMPETITION FROM MANY NEW KINDS OF SCHOOLS

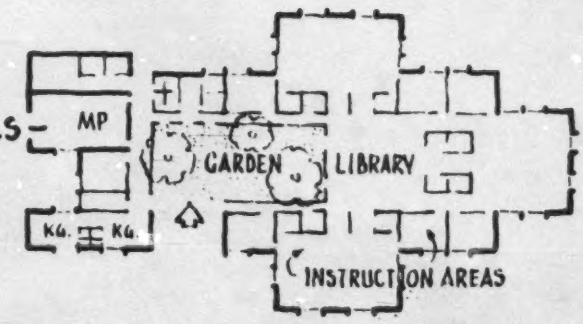

Neighborhood School
Non-neighborhood Magnet School
Metropolitan School serving city & suburbs
Specialized School (as a commercial high school)
Program using the city as its facility
Private School
Television and Correspondence School

MANY NEW KINDS OF SCHOOLS EVOLVE

EXAMPLE = PRE-SCHOOLS FOR EARLY CHILDHOOD EDUCATION –

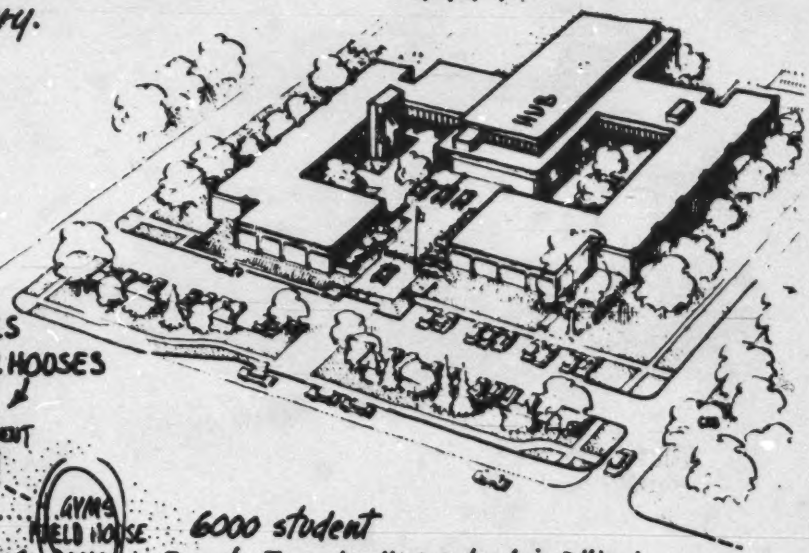
EXAMPLE = OPEN-PLAN ELEMENTARY SCHOOLS –

Butternut School, in North Olmstead, Ohio, mixes large and small instruction areas, without doors, around a garden and library.

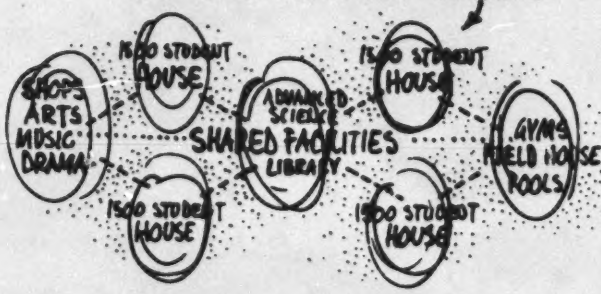


EXAMPLE = MIDDLE SCHOOLS –

Carleton W. Washburne School in Winnetka, Illinois, clusters two houses around courts and a hub.



EXAMPLE = LARGE SECONDARY SCHOOLS SUB-DIVIDED INTO SMALLER HOUSES



6000 student Evanston Township High School, in Illinois, gains the advantages of big and small schools with 4 houses of 1500 students each.

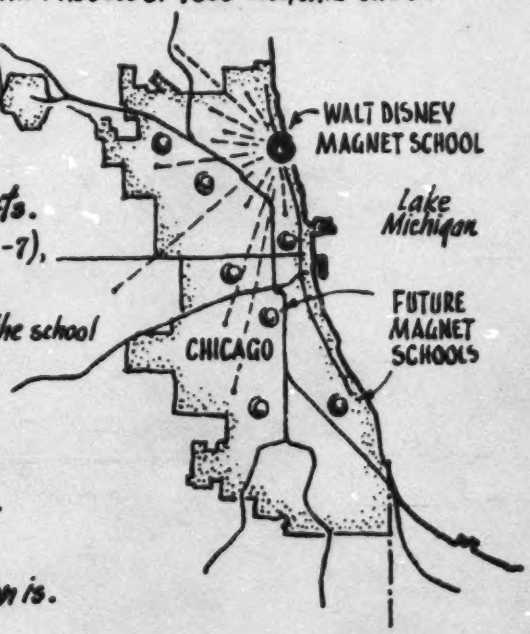
EXAMPLE = SPECIAL PROGRAM MAGNET SCHOOLS –

Walt Disney Magnet School (Stanton Leggett, educational consultant) overlooking Lake Michigan in Chicago will attract students from all parts of the city for a program emphasizing the communication arts.

In addition to 600 lower school pupils (ages 3-7), 600 middle and 600 upper school pupils, every 2 weeks 600 transient pupils will visit the school for 2 week long programs in the arts.

This is to be a non-neighborhood school – a new option open to any pupil in the city .... plus some suburban and private school pupils.

The city is where the need is .... and where some of the new action is.



THE RETURN OF THE SMALL SCHOOL?

Noting new interest in neighborhood government and smaller communities, and new interest in the advantages of small schools, especially their ability to provide individualized instruction ...

... Leggett, Shapiro, Cohodes, & Brubaker developed the "Smallway" concept — to re-examine the advantages of a 240 student high school.

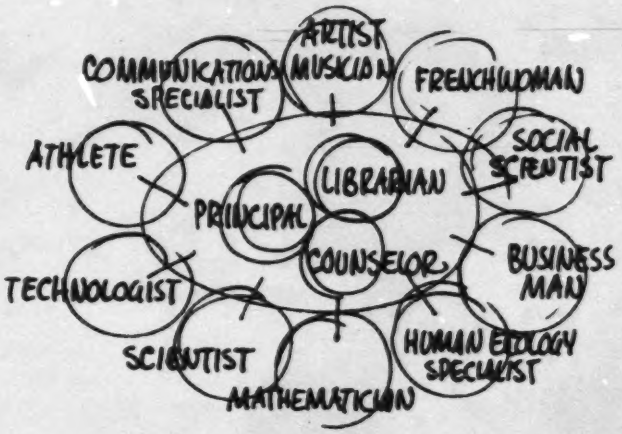
(see "The Case for a Small High School" in "Nations Schools," September, 1970)

The educational program requires a single open-plan space ...

... and a dozen faculty members

The Smallway high school faculty —

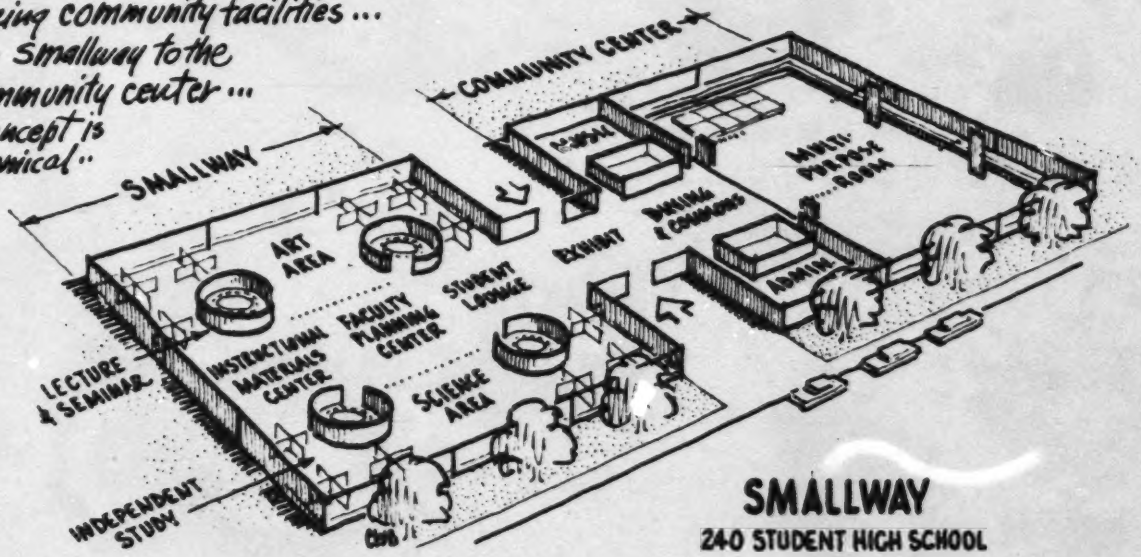
(supplemented by other people in the community)



By utilizing community facilities ...

... linking Smallway to the community center ...

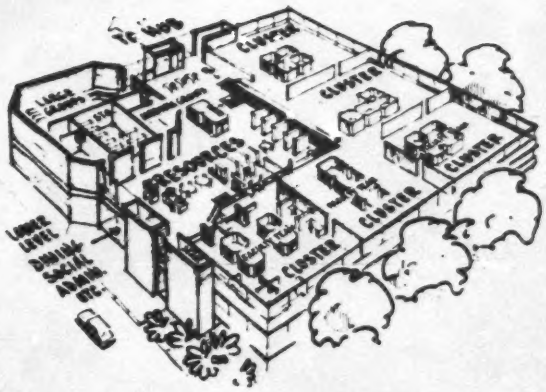
.. the concept is economical ..



SMALLWAY
240 STUDENT HIGH SCHOOL

NEW PLANNING TOOLS

for the programming and design of the new schools



First... UNDERSTANDING—
of the goals of education, the program, the learning process, and the purposes of facilities.

THE MULTI-DISCIPLINE TEAM
... recognizing the complexity of the problem and the interrelatedness of the disciplines influencing design.

COMMUNITY INVOLVEMENT AND ADVOCACY PLANNING—
... in which each group advocates what it deems proper.

THE CHARRETTE
... providing, in a condensed time period, an opportunity for students, teachers, citizens, and architects to work creatively in concert.

THE COMPUTER—
... which organizes the growing quantities of necessary data, makes more accurate and faster calculations possible, and permits consideration and evaluation of more alternates.

... and other new OFFICE MACHINES AND TECHNIQUES
which help produce work more efficiently.

THE SYSTEMS APPROACH—
... which systematically orders the use of resources making parts work together effectively as a whole.

Concurrently...
SOLVING THE NEXT LARGER PROBLEM
... understanding, respecting and improving the total environment of the area
.... education being a component interrelated with all other community needs and concerns.

— PERKINS & WILL - CHICAGO, WHITE PLAINS, WASHINGTON